



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,026	09/18/2003	Darrin W. Kabel	702.254	9123
38933	7590	05/03/2006	EXAMINER	
GARMIN LTD. C/O GARMIN INTERNATIONAL, INC. ATTN: Legal - IP 1200 EAST 151ST STREET OLATHE, KS 66062			MEHMOOD, JENNIFER	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/667,026

Applicant(s)

KABEL ET AL.

Examiner

Jennifer A. Mehmood

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on March 28, 2006 (RCEX filed).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/28/2006
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 19, 20, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bailey et al. (US 4,873,676).

For claim 19, Bailey discloses a method for marine navigation, comprising: receiving one or more preselected conditions from a user (col 7, Ins 62-68; col 8, Ins 1-4, 19, and 20; Fig. 1, item 15a, 16a); receiving a user defined graphical filter area from the user (col 4, Ins 11-14; col 8, Ins 15-17); identifying the user defined graphical filter area on a display (col 8, Ins 25-37; Fig. 1, item 15a); analyzing cartographic data only within the user defined graphical filter area for the preselected conditions (col 3, Ins 26-36 and 46-48); and providing an alert signal when cartographic data within the user defined graphical filter area indicate the preselected conditions (col 9, Ins 1-15; col 15, Ins 25-28; col 23, Ins 30-38; col 28, Ins 40-45).

For claim 20, Bailey discloses identifying the user defined graphical filter area includes repositioning the user defined graphical filter area (col 3, Ins 30-36; col 4, Ins 11-24; col 8, Ins 14-20; col 10, Ins 59-68; col 11, Ins 1-17).

For claim 22, Bailey discloses receiving preselected conditions selected from the group of land, water depth, rock(s), sandbars, shelves, tide condition, tidal data, wind

Art Unit: 2612

conditions, ice, above-water obstacles, underwater obstacles, type of water bottom, and prohibited areas (col 10, Ins 50-55; col 28, Ins 18-32 and 40-45).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 6, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 2004/0006423) and further in view of Tobin, Jr. (US 4,323,992).

For claim 1, Fujimoto discloses a method for marine navigation, comprising: receiving one or more preselected conditions from a user (parag 0115; parag 0018; 0047; 0115; Fig. 17a-c, items 301, 302); identifying a potential waypoint (paragraph 0071, 0072; Figure 4); and performing a marine route calculation algorithm to route a course between a first location and the potential waypoint avoiding the preselected conditions (parag 0076-0078). Fujimoto does not disclose selecting a preselected condition from the group of water depth, sandbars, shelves, tidal data, wind conditions, weather conditions, ice, and type of water bottom. However, Tobin discloses a user selected (preselected) condition of water depth (col 8, Ins 54-62; col 9, Ins 6-16 and 36-39). It would have been obvious to include the preselected condition of water depth so that a ship's operator acknowledges a dangerous water depth and verifies that the ship is

maneuvered around or away from an insufficient water depth to ensure the safety of the ships' passengers.

For claim 2, Fujimoto discloses performing the marine route calculation algorithm to include analyzing cartographic data that include preselected conditions between the first location and the potential waypoint with a preference for avoiding preselected conditions (parag 0023, parag 0106, lines 1-7; parag 0113; parag 0115).

For claim 3, Fujimoto discloses the marine route calculation algorithm further includes re-routing the course to avoid the preselected conditions when the marine route calculation algorithm identifies one or more preselected conditions between the first location and the potential waypoint (parag 0023, 0132, 0133; Fig. 22a, 22b).

For claim 5, Fujimoto determines a first location on the course based on a signal from a GPS; and analyzing cartographic data for a predetermined area around the first location for preselected conditions (parag 0067, Ins 1-10; parag 0068, last 9 lines; parag 0071, 0072).

For claim 6, Fujimoto does not disclose an alert signal; however, Tobin discloses an alert signal when analyzed cartographic data for the predetermined area around a location includes preselected conditions (col 12, Ins 34-40; Fig. 8, items 252, 248). It would have been obvious to provide an alert signal so that a ship's operator acknowledges an alert and verifies that the ship is maneuvered around a preselected condition to ensure the safety of the ships passengers.

For claim 42, Fujimoto discloses a first location and a potential waypoint independent of a current location of a device implementing the method (parag 0139; 0140).

For claim 43, Fujimoto discloses at least a portion of the course is unrelated to a current heading of a device implementing the method (parag 0140, last 10 lines).

4. Claims 4 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 2004/0006423) and Tobin, Jr. (US 4,323,992), and further in view of Michaelson et al. (US 6,734,808).

For claim 4, Fujimoto discloses re-routing the course calculated, but does so by identifying user waypoints (parag 0140, lns 1-5). Michaelson, on the other hand discloses re-routing a course by identifying one or more non-user waypoints (determined by the system, not the user) between the first location and the potential waypoint (col 24, lns 41-50 and 55-64). It would have been obvious to disclose non-user waypoints so that an operator of a ship relies on automatic navigation between a point of origin and a destination without constantly monitoring the ship's travel route.

For claim 7, Fujimoto does not disclose an alert signal between a first location and a potential waypoint; however, Michaelson discloses an alert signal is provided when the analyzed cartographic data for the predetermined data between the first location and the potential waypoint includes preselected conditions (col 6, lns 13-26). It would have been obvious to provide an alert signal so that a ship's operator acknowledges an alert and verifies that the ship is maneuvered around a preselected condition to ensure the safety of the ships passengers.

For claim 8, the claim is interpreted and rejected for the same reasons as stated in the rejections of claim 6 and 7 as stated above. In addition, Michaelson discloses the alert signal includes emitting an audio alert (col 6, lns 15-18; Fig. 2, item 28). It would have been obvious to emit an audio alert so that a ship's operator acknowledges an alert and verifies that the ship is maneuvered around a preselected condition to ensure the safety of the ships passengers.

For claim 9, the claim is interpreted and rejected for the same reasons as stated in the rejections of claim 6-8 as stated above. Michaelson discloses providing the alert signal to include displaying a visual alert. It would have been obvious to emit a visual alert so that a ship's operator acknowledges an alert and verifies that the ship is maneuvered around a preselected condition to ensure the safety of the ships passengers.

For claim 10, Fujimoto discloses receiving preselected conditions, but does not include weather conditions. However, Michaelson discloses this feature (col 26, lns 18-30). It would have been obvious to include weather conditions, so that an operator of a ship predicts changing weather patterns via a weather radar display.

5. Claims 11, 12, 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 20045/0006423), and further in view of Tobin, Jr. (US 4,323,992).

For claim 11, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 1 and 6 as stated above.

For claim 12, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 3 as stated above.

For claim 15, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 5 as stated above.

For claim 16, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

For claim 17, Fujimoto discloses analyzing cartographic data further comprises acquiring cartographic data from a GPS (parag 0067, Ins 1-5).

For claim 18, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 1 and 11 as stated above.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. (US 4,873,676), and further in view of Fujimoto et al. (US 2004/0006423).

Bailey discloses analyzing cartographic data, but does not acquire the cartographic data from a GPS; however, Fujimoto discloses acquiring cartographic data from a GPS (parag 0067, Ins 1-10; parag 0068, last 9 lines; parag 0071, 0072). It would have been obvious to acquire cartographic data from a GPS so that a ship's captain relies on accurate real-time data in order to ensure a navigational route.

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 20045/0006423) and Tobin, Jr. (US 4,323,992), and further in view of Michaelson et al. (US 6,734,808).

For claim 13, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 4 as stated above.



For claim 14, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 7 as stated above.

8. Claims 23-25, 27-29, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 20045/0006423) and Tobin, Jr. (US 4,323,992).

For claim 23, Fujimoto discloses a computer readable medium having a set of computer readable instructions (parag 0067, Ins 1-10; parag 0068, Ins 1-8 and last 12 lines), the set of computer readable instructions comprising instructions for: receiving one or more preselected conditions from a user (parag 0115, parag 0018; 0047; 0115; Fig. 17a-c, items 301, 302); identifying a potential waypoint upon a first event (parag 0071, 0072; parag 0077, 0078); and performing a marine route calculation algorithm to analyze a course between a first location and the potential waypoint in view of preselected conditions (parag 0082). Fujimoto does not disclose selecting a preselected condition from the group of water depth, sandbars, shelves, tidal data, wind conditions, weather conditions, ice, and type of water bottom. However, Tobin discloses a user selected (preselected) condition of water depth (col 8, Ins 54-62; col 9, Ins 6-16 and 36-39). It would have been obvious to include the preselected condition of water depth so that a ship's operator acknowledges a dangerous water depth and verifies that the ship is maneuvered around or away from an insufficient water depth to ensure the safety of the ships' passengers.

For claim 24, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 2 as stated above.

For claim 25, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 3 as stated above.

For claim 27, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 5 as stated above.

For claim 28 is interpreted and rejected for the same reasons as stated in the rejection of claim 6 as stated above.

For claim 29, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 17 as stated above.

For claim 33, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 23 as stated above.

9. Claims 26, and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 2004/0006423) and Tobin, Jr. (US 4,323,992), and further in view of Michaelson et al. (US 6,734,808).

Claim 26 is interpreted and rejected for the same reasons as stated in the rejection of claim 4 as stated above.

Claims 30-32 are interpreted and rejected for the same reasons as stated in the rejection of claims 7-9, respectively, and as stated above.

10. Claims 34-36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 2004/0006423), and further in view of Tobin, Jr. (US 4,323,992).

For claim 34, Fujimoto discloses an electronic marine navigation device, comprising: a processor; a user interface operatively coupled to the processor, wherein the user interface receives one or more preselected conditions from a user (parag 0018;

0047; 0115; Fig. 17a-c, items 301, 302); a location input operatively coupled to the processor, wherein the location input receives a first location and a potential waypoint separate from the first location (parag 0067, lns 6-12; Fig. 1, items 2, 3); and a memory operatively coupled to the processor and the location input (parag 0116), the memory having cartographic data including data related to the preselected conditions (parag 0115), wherein the processor operates on a marine route calculation algorithm to analyze a course between the first location and the potential waypoint in view of the preselected conditions of the cartographic data. Fujimoto does not disclose selecting a preselected condition from the group of water depth, sandbars, shelves, tidal data, wind conditions, weather conditions, ice, and type of water bottom. However, Tobin discloses a user selected (preselected) condition of water depth (col 8, lns 54-62; col 9, lns 6-16 and 36-39). It would have been obvious to include the preselected condition of water depth so that a ship's operator acknowledges a dangerous water depth and verifies that the ship is maneuvered around or away from an insufficient water depth to ensure the safety of the ships' passengers.

For claim 35, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 2 and 34 as stated above.

For claim 36, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 3 and 34 as stated above.

For claim 38, Fujimoto discloses a GPS system operatively coupled to the processor (Fig. 1, items 3, 6; parag 0066, lns 1-3, 12-16), wherein the processor determines the first location on the course based on a signal received from the GPS

(parag 0068, last 9 lines), and analyzes cartographic data for a predetermined area around the first location for preselected conditions (parag 0072; 0113). Even though Fujimoto does not specifically disclose a GPS receiver, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to include a GPS receiver to receive signals from a satellite in order to determine the ships position.

11. Claims 37, 39, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 2004/0006423) and Tobin, Jr. (US 4,323,992), and further in view of Michaelson et al. (US 6,734,808).

For claim 37, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 4 and 34 as stated above.

For claim 39, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 6 and 34 as stated above.

For claim 40, the claim is interpreted and rejected for the same reasons as stated in the rejection of claims 7 and 34 as stated above.

12. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 20045/0006423) and Tobin, Jr. (US 4,323,992), as applied to claim 34, and further in view of Bailey et al. (US 4,873,676).

Fujimoto discloses a processor to operate on the marine route calculation algorithm to analyze cartographic data (parag 0067, Ins 6-12; parag 0068, Ins 1-10); however, Fujimoto does not disclose an alert signal. Tobin discloses an alert signal wherein a processor provides an alert signal when analyzed cartographic data includes preselected conditions (col 12, Ins 34-40; Fig. 8, items 252, 248). It would have been

obvious to provide an alert signal so that a ship's operator acknowledges an alert and verifies that the ship is maneuvered around a preselected condition to ensure the safety of the ships passengers. However, neither Fujimoto nor Tobin discloses a user defined graphical filter area. Bailey, on the other hand, does disclose a user defined graphical filter area (col 4, lns 11-14; col 7, lns 62-68; col 8, lns 1-4, 15-17, 25-37; Fig. 1, item 15a, 16a); wherein a processor operates to analyze cartographic data within the defined graphical filter area and provides an alert signal when the analyzed cartographic data for the user defined graphical filter area includes preselected conditions. It would have been obvious to display cartographic data as a user defined graphical filter area to so that a user has a certain degree of control over the display in order to customize it according to the user's preferences.

13. Claim 44 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 2004/0006423) and further in view of Tobin, Jr. (US 4,323,992).

Fujimoto discloses a method for marine navigation, comprising: identifying a potential waypoint (paragraph 0066; 0072, lines 1,2); and performing a marine route calculation algorithm to analyze a course between a first location and the potential waypoint (parag 0068, lns 5-8) in order to avoid preselected conditions received from a user. Fujimoto does not disclose selecting a preselected condition from the group of naturally occurring land mass, water depth, sandbars, shelves, wind conditions, weather conditions, ice, and type of water bottom (parag 0047; parag 0115; Fig. 17a-c, items 301, 302). However, Tobin discloses a user selected (preselected) condition of water depth (col 8, lns 54-62; col 9, lns 6-16 and 36-39). It would have been obvious to

Art Unit: 2612

provide an alert signal so that a ship's operator acknowledges a dangerous water depth and verifies that the ship is maneuvered around or away from an insufficient water depth to ensure the safety of the ships' passengers.

14. Claims 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (US 2004/0006423) and further in view of Walsh et al. (US 3,886,487).

For claim 45, Fujimoto discloses a method for marine navigation, comprising: receiving indication of a preselected condition from a user (parag 0047; parag 0115; Fig. 17a-c, items 301, 302); identifying a potential waypoint (paragraph 0066; 0072, lines 1,2); and performing a marine route calculation algorithm to route a course between a first location and the potential waypoint (parag 0068, Ins 5-8) in order to avoid the preselected condition. Fujimoto, on the other hand, discloses neither receiving indication of a minimum water depth from a user nor avoiding water depth less than the minimum water depth. However, Walsh discloses receiving indication of a minimum water depth from a user and avoiding water depth less than the minimum water depth (col 2, Ins 13-19; col 3, Ins 21-30; col 8, Ins 24-34, 53-60; col 9, Ins 1-10; Fig. 4, items 182, 184, 186, 188, 98; Figs. 1 and 2, items 40, 42, 48). It would have been obvious to avoid a water depth less than the minimum water depth so that a ship's operator acknowledges a dangerous water depth and verifies that the ship is maneuvered around or away from an insufficient water depth to ensure the safety of the ships' passengers.

For claim 46, Fujimoto discloses displaying a visual indication of places along the calculated course to include expected preselected conditions (parag 0047; parag 0115; Fig. 17a-c, items 301, 302); however, Fujimoto does not disclose the preselected conditions to include a water depth that is expected to approach the minimum water depth. Walsh, on the other hand, discloses receiving indication of a water depth that is expected to approach the minimum water depth. (col 3, Ins 21-30; col 8, Ins 24-34, 53-60; col 9, Ins 1-10; Fig. 4, items 182, 184, 186, 188, 98; Figs. 1 and 2, items 40, 42, 48). It would have been obvious to avoid a water depth less than the minimum water depth so that a ship's operator acknowledges a dangerous water depth and verifies that the ship is maneuvered around or away from an insufficient water depth to ensure the safety of the ships' passengers.

15. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (2004/0003958) and further in view of Fujimoto et al. (US 2004/0006423).

Fujimoto '958 discloses a method for marine navigation comprising: receiving indication of a minimum water depth from a user (Fig. 3, item 47; parag 0125, Ins 7-14; parag 0126, Ins 3, 4, 10-17); displaying marine cartographic data (Fig. 3); displaying substantially straight line between a first location and a second location, wherein the line depicts both where the water depth is expected to be greater than the minimum water depth and where the water depth is expected to be less than the minimum water depth (parag 0073; Fig. 3, items 45, 47, 43; parag 0125, Ins 6-15). Fujimoto '958, however, discloses neither receiving indications of waypoints nor performing a marine route calculation algorithm to route a course between a first location and a potential waypoint

Art Unit: 2612

avoiding water depth less than a minimum water depth. Fujimoto '423, on the other hand, discloses receiving indications of waypoints and performing a marine route calculation algorithm to route a course between a first location and a potential waypoint avoiding a preselected condition (parag 0075-0078; parag 0115; 0047; 0115; Fig. 17a-c, items 301, 302). It would have been obvious to receive indications of waypoints and perform a marine route calculation algorithm to route a course between a first location and a potential waypoint avoiding water depth less than the minimum water depth so that accurate navigation is achieved while avoiding low water levels to ensure the safety of the ships' passengers.

16. Claims 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto et al. (2004/0003958) and further in view of Fujimoto et al. (US 2004/0006423).

For claim 48, the claim is interpreted and rejected for the same reasons as stated in the rejection of claim 47 as stated above.

For claim 49, Fujimoto '958 discloses the minimum water depth is user selectable (Fig. 3, item 47; parag 0125, lns 7-14; 0126, lns 3, 4, 10-17).

For claim 50, Fujimoto '958 discloses a line depicted in a first manner where the water depth is expected to be greater than the minimum water depth and the line is depicted in a second manner where the water depth is expected to be less than the minimum water depth (parag 0133; Fig. 23, items 128, 124, 125; parag 0129).



***Response to Arguments***

17. Applicant's arguments with respect to claims 1-50 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Mehmood whose telephone number is (571) 272.2976. The examiner can normally be reached 8:00-4:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Daniel Wu can be reached at (571) 272.2964. The fax phone number for the organization where this application or proceeding is assigned is (571) 273.8300 for regular and after final communications.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272.2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/667,026

Page 17

Art Unit: 2612

Jennifer Mehmood

April 25, 2006

  
**BENJAMIN C. LEE**  
**PRIMARY EXAMINER**